BY ORDER OF THE COMMANDER
6TH AIR MOBILITY WING

MACDILL AIR FORCE BASE
INSTRUCTION 32-113

5 SEPTEMBER 2003

Civil Engineer

HEATING/COOLING OPERATIONAL MODES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: 6 CES/CECB (Mr. Gregg)
Supersedes MACDI 32-113, 1 July 1998

Certified by: 6 AMW/CC (Col Snyder)
Pages: 3
Distribution: F

This Instruction establishes procedures for changing the operational mode(s) of heating, ventilating, and air conditioning (HVAC) systems at MacDill Air Force Base (AFB). This instruction applies to all personnel, commanders, facility managers, and tenants who occupy facilities on MacDill AFB.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This revision updates the periods in the year when the facilities are to be operated in the cooling and heating modes and the minimum/maximum cooling and heating temperatures, respectively. It also specifies the hours of building and HVAC on/off scheduling, temperature management, and night temperature setback schedules through the use of Energy Management Control Systems (EMCS).

1. General. Facility occupants who switch HVAC systems must follow the guidance listed in paragraph **3.** below. Systems controlled or required to have the mode changed by the 6th Civil Engineer Squadron (6 CES) and systems with special requirements are described below. HVAC systems are in place to provide facilities with conditioned air at a maximum of 70º F in the Heat Mode, and a minimum of 76º F in the Cooling Mode.

1.1. MacDill AFB is in a high humidity region and requires adequate humidity control in order for facilities to remain comfortable. Most cooling systems cannot control humidity at 78º F. Therefore, most facility cooling systems will be structured to maintain 76º F at 50 percent humidity.

2. Operating Conditions.

2.1. Facilities with unique equipment cooling needs, medical facilities, and critical facilities will have both heating and cooling capability provided year round.

2.2. Billeting facilities will be changed from the cooling mode to the heating mode and vice versa by HVAC personnel upon request of the 6th Services Squadron Commander (6 SVS/CC) or deputy commander through the 6 CES/CC.

3. Responsibilities.

3.1. In general, the cooling season is from 1 April – 30 November, except those facilities identified in paragraph **2.** above. During the period 1 December – 31 March, the 6 CES Commander will determine the mode.

3.2. The mode will be determined using sound judgment based on current and forecasted weather conditions that include a minimum of three days of a forecasted weather pattern.

3.2.1. Systems will be operated in the heating mode when the forecasted low temperature is at or below 40^{o} or forecasted high will be at or below 55^{o} F for at least 3 days.

3.2.2. Systems will be operated in the cooling mode when the forecasted high will be at or above 80^{o} F and the relative humidity is above 75 percent or forecasted high will be at or above 85^{o} for at least 3 days.

3.2.2.1. In any condition change, systems with a two pipe system (cooled and heated water share the same piping) the minimum the water in the system must be at or below 90^{o} before the cooling mode can be operational.

4. Determination of Hours of Operation.

4.1. Many facilities are controlled using energy management control systems. These facilities will be managed to maximize cost savings through HVAC system temperature management, system on/off scheduling, and/or night setback mechanisms.

4.2. In general, facilities will be operational in the current mode from 0700-1700 every duty day. Facilities with 24-hour operations or extended hours must inform 6 CES by letter to ensure that the facility is kept in the operational mode while the facility is occupied.

4.3. 6 SVS clubs will forward a copy of their weekly HVAC system needs by activity room at least one week prior to the scheduled activity. These requests may be made electronically or by fax to the Customer Service Office (6 CES/CEPC). It is the responsibility of the club managers to ensure that 6 CES receives the activity listing.

5. Priority of Response to HVAC Trouble Calls.

5.1. All HVAC trouble calls will be responded to using sound judgment as deemed necessary by the situation. The following is a guideline to use to aid in determining the level of response:

5.1.1. HVAC systems with a complete system failure will be considered an emergency when the ambient temperature is at or above 95^{o} F, where an occupant has a medical waiver, when there is a hospital necessity, or in designated areas of critical facilities.

5.1.2. HVAC systems with a complete system failure will be considered as urgent for all other facilities and for individual dormitory/billeting rooms.

5.1.3. HVAC systems with partial cooling failure or less than ideal performance will be considered routine.

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